

REMARKS

Applicants would like to thank the Examiner for careful consideration given this application and the Office Action mailed April 25, 2006.

Claims 1-7 and 9-10 are pending in the application. Claims 1, 9 and 10 have been amended. Claims 11-16 have been cancelled. Support for all amendments can be found in the specification as originally filed. No new matter has been added.

REJECTIONS UNDER 35 USC 112, SECOND PARAGRAPH

Claims 9-12, 15 and 16 stand rejected under 35 USC 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

The Examiner alleges that the amount of methyl methacrylate embraced by Claims 9 and 10 is unclear since components "A.1" and "A.2" recite methyl methacrylate as present in the copolymer.

Applicants have amended independent Claims 9 and 10 without prejudice to remove methyl methacrylate from component "A.2" and Claims 11-12, 15 and 16 have been cancelled thereby rendering the Examiner's rejection moot. Reconsideration and withdrawal of this rejection is respectfully requested.

REJECTIONS UNDER 35 USC 103

Claims 1-4, 6, 7, and 9-16 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,040,382 to Hanes et al. (hereinafter "Hanes") in view of U.S. Patent No. 5,879,596 to Roach et al. (hereinafter "Roach") or U.S. Patent No. 6,040,370 to Wozny et al. (hereinafter "Wozny") or U.S. Patent No. 5,973,974 to Campbell et al. (hereinafter "Campbell") or U.S. Patent No. 5,905,118 to Padwa et al. (hereinafter "Padwa").

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to

modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification has a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the Claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970).

The Examiner alleges that Hanes discloses all of the elements of Applicants' invention except for the weight average molecular weight limitation and argues that the disclosure of Roach would provide teaching regarding the average molecular weight that would lead a skilled artisan to the Applicants' claimed invention with only routine experimentation absent any showing of surprising or unexpected results. Applicants respectfully disagree.

First and foremost, Hanes fails to teach or suggest a polymer blend of styrene maleic anhydride (Hanes' copolymer B) and styrene-butadiene copolymer (Hanes' polymer A) having a low haze value and high transmittance as recited in amended independent Claims 1, 9 and 10. In fact, Hanes clearly states that "copolymers A and B are normally immiscible and when combined result in blends which are opaque or translucent" (column 10, lines 42-43). The haze value of the present claimed copolymer is decreased by the addition of a third component. In particular, the copolymer of amended independent Claim 1 includes two copolymers such as copolymers A and B as described above with a "haze value not greater than 15% and a transmittance greater than 87%". Accordingly, Hanes fails to teach or suggest an essentially clear copolymer having only two components as recited in amended independent Claims 1, 9 and 10. And moreover, based on the disclosure of Hanes, Applicants submit that the transmittance and haze value obtained by the composition of amended independent Claims 1, 9 and 10 represent surprising or unexpected results.

Moreover, neither Roach, Wozny, Campbell, nor Padwa teach or suggest the weight average molecular weight recited in amended independent Claims 1, 9 and 10, and therefore, these references fail to cure the deficiencies of Hanes. In particular,

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Roach teaches that the weight average molecular weight over the number average molecular weight is important with regard to processability of the copolymer and not transmittance or haze value, as recited in the present claims. Wozny, Campbell or Padwa simply teach that styrene acrylonitrile used in thermoplastic moldings may have a weight average molecular weight within the range of amended independent Claims, 1, 9 and 10. Taken together, these references fail to teach or suggest that weight average molecular weight may have any bearing on either miscibility, haze value, or transmittance of a copolymer such as the copolymer recited in amended independent Claims 1, 9 and 10. Hence, the combination of Hanes in view of either Roach, Wozny, Campbell, or Padwa fails to render obvious amended independent Claims 1, 9 and 10.

Claim 2-4 and 6-7 directly depend from and add further limitations to amended independent Claim 1 and are deemed allowable at least for the same reasons in combination with amended independent Claim 1. Reconsideration is respectfully requested.

Claims 1-7, 9, and 10 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No 5,180,535 to Yamaoka et al. (hereinafter "Yamaoka") in view of Roach and Hanes and Wozny, Campbell or Padwa.

The Examiner alleges that Yamaoka describes all of the elements of Applicants' invention, except for the average weight molecular weight limitations and the monomer concentrations, but that the number average molecular weight and monomer concentration would have been obvious to one of ordinary skill in the art in view of Roach, Wozny, Campbell, or Padwa. In addition, the Examiner alleges that Hanes discloses methods for conferring transparency, and it would have been obvious to confer transparency on the composition of Yamaoka in light of Hanes. Applicants respectfully disagree.

First and foremost, Hanes fails to provide motivation to one skilled in the art to combine the teaching of Yamaoka with those of Hanes. In particular, while Hanes may conclude the transparency is a desirable quality in a thermoplastic, Hanes teaches against combining polymers such as those taught by Yamaoka to make a transparent


copolymer since these polymers are "normally immiscible and when combined result in blends that are opaque or translucent".

Moreover, Yamaoka fails to teach or suggest a composition having a "haze value not greater than 15% and a transmittance greater than 87%" as recited in amended independent Claim 1, and as described above, Hanes in view of Roach, Wozny, Campbell or Padwa fail to teach or suggest the weight average molecular weight that allows a two component copolymer to be miscible and transparent. Hence, Hanes in view of Roach, Wozny, Campbell or Padwa fails to cure the deficiencies of Yamaoka. Accordingly, this combination of references fails to render obvious amended independent Claims 1, 9 and 10.

Claim 2-4 and 6-7 directly depend from and add further limitations to amended independent Claim 1 and are deemed allowable at least for the same reasons in combination with amended independent Claim 1. Reconsideration is respectfully requested.

It is believed that pending Claims 1-7 and 9-10 are now in condition for allowance and notice to such effect is respectfully requested. Should the Examiner have any questions regarding this application, the Examiner is invited to initiate a telephone conference with the undersigned.

Respectfully submitted,

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